Getting Started With Your Aquathin SOFT & CLEAN SYSTEM

Models ASC25K/F, ASC40K/F, ASC45K/F, ASC60K/F

(In full color at www.aquathin.com)

Includes setup and maintenance information for:
Aquathin Soft&Clean system

AN ISO 9001:2008 QMS
REGISTERED /CERTIFIED COMPANY
(IMS-0192 & NQA-12635)

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GETTING STARTED

Thank you for purchasing this quality water conditioning and softening system by Aquathin Corporation. The SOFT & CLEAN Water Conditioning Series is a compact, total home water protection system for the removal of calcium, magnesium (which are hard water constituents) and up to 5 parts per million of iron. The exclusive Aquathin SOFT & CLEAN system can also treat tannins, nitrates and colloidal silica. Please consult with your local Authorized Aquathin Dealer regarding these options.

The SOFT & CLEAN system allows a remarkable flow rate of up to 20 gallons per minute; it saves up to 50% on salt; it saves water and reduces sewerage taxes as well. The advanced technology of the system allows it to monitor water usage even during power failure and the system initiates regeneration only when needed.

As the new owner of an Aquathin RO/DI water conditioning system there is a totally new experience awaiting you. Showers and baths will feel cleaner and fresher. Laundry and dishes will be brighter and spot free.

This manual provides information about the application and servicing of your Aquathin water softening system. Descriptions of the components and their functions will help to answer frequently asked questions. By thoroughly

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reading this manual you will be better able to operate your new system and perform simple maintenance.

SETTING UP YOUR SYSTEM

Your Aquathin system requires adequate water pressure; a minimum of 25 PSI (pounds per square inch) of water pressure is required for the regeneration valve to operate effectively. The amount of conditioned water produced depends primarily on your source water hardness and capacity. Installation to comply with state and local laws and regulations.

As the Soft&Clean water conditioner system will be installed on existing plumbing sources; it is important to ensure that the condition of the existing plumbing is free from lime and iron buildup. Replace piping that has heavy lime and/or iron buildup. If piping is clogged with iron, consult with your local authorized Aquathin Dealer regarding a separate iron filter unit ahead of the water softener.

The Aquathin Soft&Clean system requires an uninterrupted alternating current (A/C) supply. Please make sure that the voltage supply is compatible with the unit before installation. (110V/60Hz or 220V/50Hz for international)

IMPORTANT NOTE:

While installing the Soft-&Clean system, please follow this cautionary note:

- This system is to be supplied with cold water only.
- Do not exceed 120 PSI (8.5 bar) water pressure.
- Do not exceed 110º F (43º C) water temperature.
- Do not subject the unit to freezing conditions.
- This system is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before the system

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Installing Your System Requires the Following Steps:

- Identify suitable location for the unit, preferably near a clean working drain—the location should be swept clean before the unit is positioned to avoid tank puncture.
- Perform all plumbing according to local plumbing codes.
- Turn off the main water supply valve.
- Turn off the power source for the electric water heater, or if gas, turn the heat control to pilot.
- Relieve water pressure by opening any cold water faucet before cutting the water line to make the installation.
- Solder pipes to adaptors, which will be screwed into the bypass valve.
- Screw adaptors into the bypass valve before mounting the bypass valve onto the resin tank.
- Lubricate the distributor o-ring seal and tank o-ring seal. Place the main control valve on tank.
- Wrap a wet rag around the bypass valve to prevent internal damage by heat transfer as you proceed with soldering.
- NOTE: the water outlet is on the left side of the unit—you will notice that an arrow indicates the outlet—showing water flow away from the unit; whereas if you stand in front of the unit, the inlet is on your right side.
- Put approximately 1” of water in the salt tank.
- Turn on the water supply.
- Place the bypass valve in **Bypass** position and check for leaks.
- Connect the drain line flow control fitting.
- Plug the unit into an electrical outlet.
- Set time of day and water hardness.

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1. Unpack the System

Contents include:

1. Main control valve
2. Drain line
3. Resin tank (with chrome jacket and distributor tube)
4. Patented Clip Cabinet™ with:
    a) built-in salt storage tank
    b) built-in Safety Float Assembly and brine well
    c) tubing

Figure 1. Package Contents

5. Brine line fitting components:
    e) fitting nut
    f) ferrule
    g) tube insert
    h) brine line screen
6. Upper basket

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2. Required Tools

While installing the unit, you will need:
Silicone lubricant and **Teflon tape** for the fittings.

Other tools and pipes may be required by the installer for soldering and cutting while fitting the unit to the water source and drain line.

The SOFT & CLEAN System requires **water softener salt** specifically manufactured for water softeners.

3. Planning the Installation

Review the following instructions completely before proceeding. (See installation diagram in Appendix B) The Aquathin SOFT & CLEAN System is a unique two-tank design in a single footprint that fits easily in compact spaces.

1) Warm the valve to room temperature during cold weather

During cold weather it is recommended that the installer warm the main control valve to room temperature before operating.

2) Select and prepare the location

We encourage you to establish the desired location of each of the components before proceeding. It is recommended that you install the unit near a clean and working drain.

Be sure that the area where the SOFT & CLEAN system will be installed is swept clean before the unit is positioned for installing to avoid puncture of the storage tank.

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If installed outdoors, put down plywood or a concrete stone in order to provide a flat, even surface for the SOFT & CLEAN system to be placed upon. (CAUTION: this unit will crack if allowed to freeze).

4. Connecting the Control Valve to the Resin Tank

1) Lubricate the distributor o-ring located by the control valve throat as shown in figure 2.

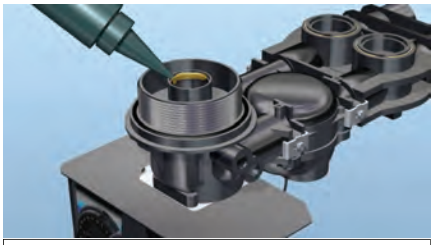

Fig. 2. Lubricate distributor o-ring with silicone lubricant.

2) Lubricate the tank o-ring seal, as shown in figure 3. NOTE: use only silicone lubricant.

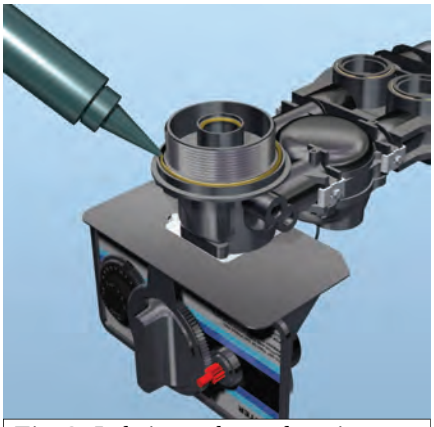

Fig. 3. Lubricate the tank o-ring.

3) Attach the provided upper basket (bayonet fit) to the control valve as shown in figure 4.

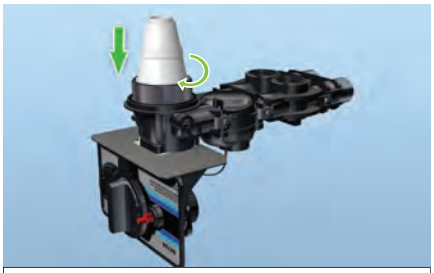

Fig. 4. Make sure the upper basket locks into place.

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4) Screw the control valve on the resin tank—turning it clockwise (figure 5).

Fig. 5. While screwing the valve onto the resin tank, make sure the distributor tube locks into place.

5. Preparing Connection to Water Source

1) Turn off the main water supply valve for your residence / company.

2) Turn off power source for electric water heater.

If the water source is connected to an electric water heater, turn it off. In the case that it is connected to a gas heater, turn the heat control to pilot. If a shut-off valve is provided on the inlet side of the water heater, close that during the SOFT & CLEAN System installation.

3) Relieve water pressure

Relieve water pressure by opening up any cold water faucet before cutting the water line to make the installation.

6. Connecting Water Source to Bypass Valve

As the SOFT & CLEAN water softening system will be installed on existing plumbing sources, it is important to ensure that the condition of the existing plumbing is free from lime and iron buildup.

Replace piping that has heavy lime and/or iron buildup.

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If piping is clogged with iron, install a separate iron filter unit ahead of the water softener system.

1) Unscrew the bypass valve

Unscrew the bypass valve from the main control valve of the unit as shown in figure 6.

Fig. 6. Unscrew the bypass valve, and remove the adaptor clips.

2) Solder pipes to adaptors

According to your local plumbing codes, the installer must identify appropriate pipes to be connected to the bypass valve.

The pipes must be first soldered onto the adaptors as shown in figure 7.

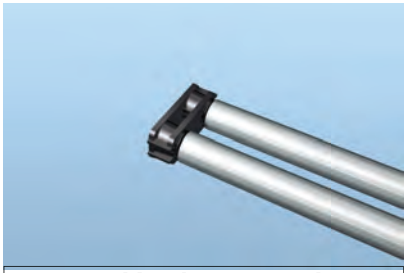

Fig. 7. Solder the pipes to the adaptors.

3) Screw adaptors into bypass valve

The adaptors can then be screwed onto the bypass valve as shown in figure 8.

Fig. 8. Screw the adaptors back on the bypass valve.

4) Re-attach the bypass valve

Attach the bypass valve onto the main control valve using

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the provided clips and tighten the screws as shown in figure 9.

Fig. 9. re-attach the bypass valve to the main control valve.

Doing so, you will be able to measure and approximate the required length of piping from the bypass valve to the water source and outlet.

5) Solder joints with caution

Wrap a wet rag around the bypass valve to prevent internal damage by heat transfer as you proceed with soldering. It is recommended that you leave at least 6" (152mm) between the bypass valve and solder joints when soldering pipes that are connected on the bypass valve. Failure to do this can cause interior damage to the bypass valve.

7. Identifying Water Inlet vs. Outlet

As you stand in front of the unit, the inlet is on your right, while the outlet is on the left. Alternatively, you can look for the arrow near the bypass valve outlet indicating away from the unit, as shown in figure 10.

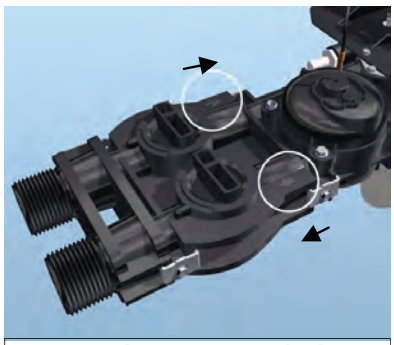

Fig. 10. The arrows on the bypass valve (as shown) indicate water inlet and outlet.

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8. Connecting the Cable to the Meter Assembly

Connect the cable from the control valve to the meter assembly as shown in figure 11.

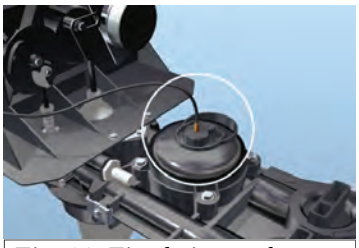

Fig. 11. Firmly insert the cable in the meter as shown.

The meter assembly of the SOFT & CLEAN water conditioning system is simple and dependable as it mechanically monitors water usage even during power failure and initiates regeneration only when needed.

9. Connecting to Drain Valve

Connect the 5/8 inch black tube provided to the drain hose barb as shown in figure 12.

Fig. 12. Connect the drain line as shown

10. Connecting the Brine Line Flow Control

In order to connect the brine line from the patented Clip Cabinet™ to the main control valve, use the brine line fittings provided:

a) fitting nut
b) ferrule
c) tube insert
d) brine line screen

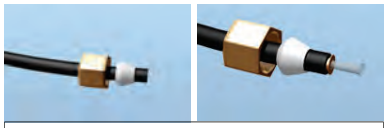

Fig. 13. Place the nut and the sleeve on the tube, followed by the tube insert and screen as shown.

Fig. 14. With the brine fittings in place, screw the brine line to the main control valve as shown.

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VERIFYING THE TUBING AND CONNECTIONS

1. Check Bypass Connections

Fig. 15. turn the bypass knobs perpendicular to the valve in order to "close" it, as shown.

Once plumbing is completed, with the bypass/service knob in the "bypass" position as shown in figure 15, open the main water supply valve and check for leaks in the bypass connection.

Open a cold water tap nearby and let water run for a few minutes or until the system is free of foreign materials (usually solder resulting from the installation). Close the water tap when water runs clean.

If there are no leaks, open the inlet valve to the water heater and restore power or gas setting on the water heater.

2. Check the Flow to the Resin Tank

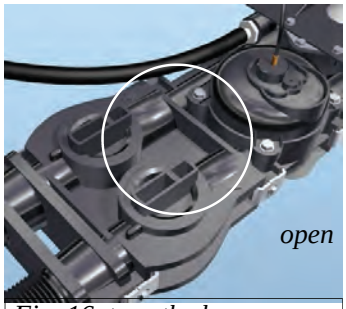

Fig. 16. turn the bypass knobs parallel to the valve in order to "open" it, as shown.

Slowly move the bypass/service knob in "**service**" position and let water flow into the mineral tank. This is an indication that the unit has purged itself of all air. See figure 16.

3. Check the Drain Line

With the regeneration knob already in "**service**" position, now rotate the knob clockwise into "**backwash**" position

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(as shown in figure 17) and allow water to flow at the drain for 3 or 4 minutes.

Fig. 17. Rotate the regeneration knob until in "backwash" position

4. Check Flow to the Brine Tank

Manually index the regeneration knob to the "**brine fill**" position" and allow the brine tank to fill to the top of the air check. See figure 18.

Fig. 18. Rotate the knob to "brine refill" position

Then manually index the control knob to the "**brine rinse**" position and allow the control to draw water from the brine tank until it stops.

STARTING YOUR SYSTEM

1. Plugging the unit into an electrical outlet

Once the installations are completed and you have verified the tubing and connections, you may plug the system into an approved power source.

2. Setting the Water Usage Program

To program your SOFT & CLEAN system, first you must set the time on the unit.
1) To set the time on the unit, refer to figure 19 and take the following steps:

- First push in the red "time set button"
- Then rotate the 24-Hour Gear so that the "time of

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day" indicator shows the current local time (i.e. if it is 2 pm your time, the "time of day" indicator should point to "2p")

- When you release the gear, check for firm engagement of the setting (indicated by a clicking sound).

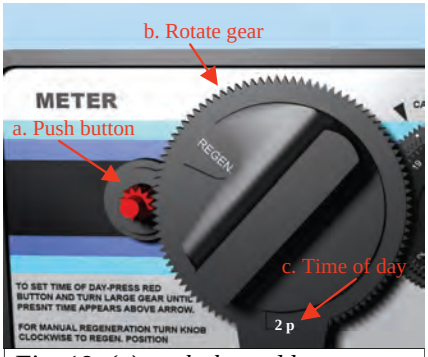

Fig. 19. (a) push the red button, (b) rotate the gear which is behind the regeneration knob (c) rotate the gear till the time shown is the same as your local time

Next, the hardness must be set; this allows the unit to monitor the system automatically and the system regenerates only when necessary.

2) For typical residential application, refer to figure 20 and take the following steps in order to set the hardness:

- Rotate the program wheel so that the white dot on the wheel is aligned to the black arrow
- Lift and rotate the gallons wheel so that the number of gallons is aligned with the black arrow and white dot.
- Check for firm engagement at setting.

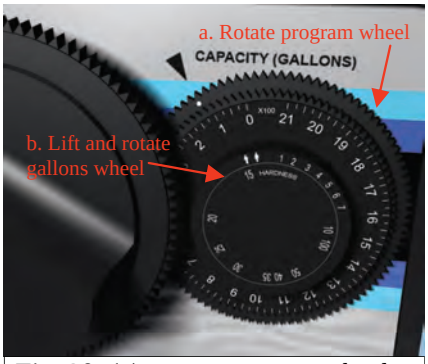

Fig. 20. (a) rotate program wheel to align white dot with black arrow, (b) lift and rotate gallons wheel to align gallons with black arrow

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For calculating the number of gallons, you may use the following formula described below:

Fig. 21. Align black arrow, white dot and number of gallons (18 in this case)

The model ASC45K has a 45,000 grains capacity. If your source water has 25 grains per gallon (gpg), then the gallon capacity will be:

45,000 grains capacity / 25 gpg = **1,800** gallons capacity.
In this case, align the white dot and the number "18" on the gallons wheel to the black arrow, as shown in figure 21.

Consult your local Aquathin Dealer for confirmation of this setting and for water hardness testing.

3. Adding Salt to the Salt Tank

Add salt to the salt tank up to the level marked "FULL" on the outside of the tank. See figure 22.

Use only Water Softener Salt.

Fig. 22. Fill salt until the "FULL" level marked on the salt tank

4. Setting the Regeneration Knob

Manually advance the control knob to the "**regeneration**" position and allow the control to return to the "in service" position automatically (approximately 90 minutes). Do not use household water until cycles are completed. This will allow the resin tank to purge all air.

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Getting to Know Your Aquathin SOFT & CLEAN System

The Aquathin SOFT & CLEAN System provides for the elimination of hard water (and up to 5ppm iron), which causes problems to appear:

1. On household plumbing fixtures that would require harsh cleaners which may scratch and mar porcelain surfaces;
2. In water heaters causing them to lose their efficiency;
3. Within washing machines and dishwashers, requiring increased detergent use and causing spotting.
4. On internal parts of coffee makers due to plaquing, ultimately causing failure.

A Look at the Key Components

Manual Regeneration Knob

This 8-cycle adjustable control is efficient and reliable and it regenerates only when needed. During regeneration, the valve collects a heavily salted solution from the salt tank, making the resin give up the calcium and magnesium through the drain.

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The backwash cycle allows for the elimination of water through the drain.

The brine rinse cycle gets rid of the salt water, while the slow rinse cycle allows water to resettle. During these cycles, no water flows through the system.

During the brine tank refill position, the filter is back in service.

24-Hour Gear

The 24-Hour Gear enables the system to monitor water usage and regeneration cycles. In order to set the current time, press the Red time set button, and then rotate the gear till it reads the same time of day as your local time. The

Program Wheel

The program wheel works in cohesion with the 24-hour gear to monitor water usage and regeneration cycles. A simple method of setting the program wheel for typical residential applications is to align the black arrow, white dot and the gallons capacity (which can be calculated as explained on page 20).

Meter Assembly

The meter assembly of the SOFT & CLEAN water conditioning system is simple and dependable as it mechanically monitors water usage even during power failure and initiates regeneration only when needed.

To ensure strength and durability, the meter assembly is molded from glass-reinforced Noryl®.

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Clip Cabinet™ (Salt Storage Tank)
The Clip Cabinet™ gives the benefit of two-tank installation in a single footprint. The patented Clip Cabinet™ is made of reinforced virgin recycled plastic and permits easy installation and service.

The Clip Cabinet™ is protected by AquaShield™ and incorporates built-in Anti-microbial Protection, allowing the highest standards of product performance and longevity. The propriety AquaShield™ additives inhibit the growth of microorganisms which are associated with stains, odors and fouling, while helping to keep critical surfaces cleaner on a continuous basis.

OPERATING PARAMETERS

To insure proper operation of your SOFT & CLEAN system, it is advisable to collect the following information about your water supply. This information is generally available from your municipal water department, and in many cases is available from the website of your local Department of Public Works.

Pressure
Adequate water pressure must be available from your water supply to assure efficient regeneration. A minimum of 25 PSI is required for this system.

pH
The SOFT & CLEAN will hold up very well when the pH of the feed water is between 2 and 11. Water supplies with pH over 11 are very rarely, if ever, found. (Chlorine bleach has a pH of ~11.5.)

Chlorine and Chloramines
Chlorine is the most common substance added to municipal water supplies. Its purpose is to eliminate biological

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growth (i.e. chlorine is toxic). Regulations usually require there be residual chlorine when water reaches your tap. Typically, the residual concentrations of chlorine in household water range from 0.5 to 1.0 parts-per-million (ppm). Chlorine and Chloramines can foul and destroy most softener resin. Aquathin chooses a high capacity, very chlorine resilient resin to assure efficiency.

Sediment

Very high sediment concentrations can affect the resin media, control valve and meter. In areas with very high sediment concentrations, it may be necessary to install a separate filter unit ahead of the water softener. Consult your local Authorized Aquathin Dealer.

Iron

Iron concentrations greater than 5 mg/l can degrade overall system performance. If your water supply has iron concentrations above 5 mg/l, pretreatment is recommended.

If piping is clogged with iron, install a separate iron filter unit ahead of the water softener.

Hardness and More

Two thirds of the water on earth is groundwater. As it travels through rock and soil it picks up particles of calcium, magnesium, iron, lead, and other minerals. For 85% of the country, that translates into “hard water”. “Hardness” refers to the amount of calcium and magnesium in the water and is measured in grains per gallon (gpg).

Most of the problems associated with hard water are economical in nature. Hardness causes unsightly soap scum on fixtures, water spots on glasses and whitish scale deposits in your tubs and showers. Hard water means you use more soap and cleaning agents because they first have to “clean” the water before they clean anything else.

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The following guide defines your water's hardness based on two different measurements. Our test determines the grains of hardness that can easily be converted into the ppm.

Description	Grains of Hardness	Parts per Million	Laundry Detergent Required
Soft (ideal)	0.0—1.0	0—18	1/4 dispenser
Slightly Hard	1.0—3.5	18—60	1/4 dispenser
Moderately Hard	3.5—7.0	60—120	1/2 dispenser
Hard	7.0—10.5	120—180	1/2 dispenser
Very Hard	10.5—over	180—over	Full dispenser

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CHAPTER 3

Maintenance and Servicing

Minimal work is required to keep your Aquathin SOFT & CLEAN system in peak operation condition. Simply ensure that the amount of salt remains at the indicated level (shown by the “FULL” line on the storage tank).

Add Salt on a Monthly Basis

It is recommended to put a bagful of salt in the salt storage once a month. Make sure to use only water softener salt specifically manufactured for water softeners.

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Reset Time of Day if Power Supply was Interrupted
In case the electrical service to the unit has been interrupted, you may reset the time of day, and allow the system to proceed with its regeneration cycles.

Exterior Cleaning
The exterior surface of your Aquathin can be cleaned with a soft cloth. Use a mild, non-abrasive dish washing detergent or diluted spray cleaner to remove smudges or food stains, then rinse and dry the surface. Use of abrasive scouring powders or glass cleaning products containing ammonia are not recommended.

OPTIONS:
1) Self-generating germicide feature may be included to kill bacteria (often found in untreated well water) to keep the softening resin and Clip Cabinet™ clean and odor free.

2) AquaShield™ 3000 and 4000 series total home sediment and anti-microbial filter.

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CHAPTER 4

FREQUENTLY ASKED QUESTIONS

Q: How long will my Aquathin SOFT & CLEAN resin last before it needs to be replaced?
A: You can expect resin life of 10 to 13 years, when properly regenerated.

Q: What should I do if my softener fails to regenerate?
A: This could occur if your electrical service was interrupted or if you experienced power failure. You need to make sure that the power connection is functioning and then reset the "Time of Day" on your unit to the current local time. If this does not solve the problem, then contact your local AQUATHIN Dealer to replace your timer.

Q: What should I do if my softener delivers hard water?
A: You should check four things:

1) The bypass valve should be closed
2) Make sure the salt level is above the water level in the salt tank—and that the salt is up to the indicated "FULL" level.
3) The hot water tank of your water heater should be flushed frequently as well.
4) Make sure that the distribution tube is not cracked—check the o-ring and tube pilot.

If these do not solve the problem then you should contact your local AQUATHIN Dealer, who can identify the problem and recommend solutions.

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Q: What should I do if my unit uses too much salt?
A: Check the level of salt in your salt storage. You might have excess water in your brine tank because of clogged drain line. Make sure the drain line is kept clean.

Q: I am experiencing loss of water pressure—what can be done?
A: The line from the water source to the softener may have iron build-up; clean this line. If this does not solve the problem, then contact your local AQUATHIN Dealer to clean the main control valve and to add resin cleaner to the resin bed.

Q: I am losing resin through the drain line—what is causing this?
A: This may be caused if there is air in the water system. Make sure that your water well has proper air elimination control and check for dry well condition.

Q: Will drinking softened water raise my blood pressure?
A: Water softeners treat "working water" i.e. water used for bathing, dishwashers, laundry, cooling towers etc. Softened water requires less detergent and extends the efficiency and life of appliances. Cation resin based water softeners remove Calcium and Magnesium (known as "hardness") in a chemical substitution reaction whereby the calcium and magnesium are replaced with equal amounts of sodium. The more hardness in one's water, the more sodium imparted. As of the publishing of this manual, studies are incomplete concerning the correlation of consuming softened water and blood pressure. However, water softeners do not remove heavy metals (but will remove strontium, radium & up to 2 ppm lead), salts, nitrates, organics i.e. pesticides, fertilizers, drugs (refer to Aquathin Forum Q & A for drugs found in drinking water), and disease causing waterborne microorganisms.

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Your Patented Aquathin RO/DI "drinking water" systems are designed to remove all of the aforementioned including water softener salt.

Q: What is that brown fuzzy looking slimy junk in my neighbor's water softener's salt tank...and why doesn't it form in my Clip Cabinet?
A: That brown, fuzzy looking, slimy junk has a name..."halophilic bacteria" meaning capable of thriving in a salty environment. The ordinary garbage-can style salt brine tanks of ordinary softeners are notorious for bacterial "brine slime" formation in them. That cruddy, mungy, brownish, fuzzy junk is created from contaminated rock or solar salt (not fully kiln dried), or exposed to unsanitary conditions. The halophilic bacteria gets sucked into the resin tank during regeneration, can breed in the resin pores and grow downstream, causing foul odors...not to mention the thought of bathing in that isn't too nice. The Aquathin Sodialite Soft & Clean includes the patented Aquathin Clip Cabinet with AquaShield Antimicrobial vs. ordinary garbage can style brine tanks. AquaShield Antimicrobial, integrated during the molding process, keeps the Clip Cabinet's water and salt clean and pristine.

Additional system review: the Clip Cabinet is produced using the rotomold process = thicker walled and no seams. Your Clip Cabinet contains a built in sediment trapper to help prevent dirt and bacteria from contaminated salt being sucked into the control valve's screen and injectors. Your Clip Cabinet is environmentally friendly in that it contains recycled virgin polyethylene and UV inhibitor. Ordinary garbage-can style or tank-in-cabinet model is thin walled blow molded with a seam and known for cracking. Your Soft & Clean system includes a black brine draw tube with UV protection.

Theirs does not and will crack causing leaks and service

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calls. There are no failsafe features to buy in your Aquathin water softener. Your Soft & Clean Clip Cabinet system includes a backup safety float to protect against overflow when making brine...and comes with a protective brine well to keep the safety float from coming in contact with salt that could potentially prevent the float's operation. Your Clip Cabinet also includes a "J Tube Air Check" to prevent the control valve from potentially sucking all the water and pulling in air that could create water hammers in the plumbing.

Like all Aquathin components and products, our Customers get the best in thought, design, technique and efficiencies...and no brown, fuzzies !

Q: My neighbor's water softener creates messy water puddles on the floor. Why doesn't my Soft & Clean? **A:** The messy puddle is a result of cold water in the resin tank interfacing with warmer ambient room temperature forming condensation on the resin tank's surface. Your Soft & Clean's decorative resin tank jacket includes an internal sheath creating a dead air space preventing condensation.

It is recommended that you contact your AQUATHIN Dealer for a regular maintenance check of your SOFT & CLEAN Water Softening system.

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LIMITED WARRANTY

Aquathin Corporation warrants to the original owner of each Aquathin water softening system to be free from defects in materials and workmanship for as long as you own the product.

What The Warranty Covers

Full 3 Year Warranty on the valve (cleaning and maintenance not included). Lifetime Warranty on the pressure tank. A full 25 Year Warranty on the Patented Clip Cabinet for indoor use, or a full 12 Year Warranty on the Clip Cabinet for outdoor use.

Exceptions to Warranty

The Warranty does not include damage caused by or resulting from unreasonable use, including failure to provide reasonable maintenance, or incidental or consequential damages, such as water damage or damage to appliances, fixtures or other equipment. Use of other-than genuine Aquathin components will void the Warranty.

No one is authorized to change or add to this Warranty.

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Extending to Lifetime Warranty (refer to insert)

In addition to Aquathin's Exclusive Factory Direct Warranty, Aquathin will extend the warranty period of the Residential SOFT & CLEAN Series to LIFETIME under the following provisions:

1) The Extended LIFETIME Warranty is FREE whenever the Aquathin Point of Entry (P.O.E) SOFT & CLEAN Water Conditioner is purchased, as a packaged same time sale with an Aquathin Point of Use (P.O.U) Reverse Osmosis Deionization (RO/DI) System.

   Applicable models of the RO/DI System include KT90, AQUALITE, PLATINUM 90, PSS90 and AQUAKING.

2) OR the Extended LIFETIME Warranty may be purchased separately, when purchasing 1 P.O.U. or 1 P.O.E. System, at a cost of $249.00 payable to AQUATHIN CORP. USA Headquarters, in Pompano Beach, Florida.

What We Will Do To Correct An Inconvenience

Upon notice, we will repair or replace covered defective parts, free of charge to the Original Purchaser, (F.O.B. Pompano Beach, FL) excluding labor and freight for each repair or replacement.

How State Law Relates To The Warranty

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty applies to the original purchaser and gives you specific legal rights. You may also have other rights which vary from state to state.

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SPECIFICATIONS

SOFT & CLEAN Water Conditioner system comes in four alternate models. The specifications for each model are:

Model	Dimensions	Weight	Capacity
ASC25K/F	27”L X 17”W X 43”H	96 lbs.	25,000 grains
ASC40K/F	27”L X 17”W X 43”H	110 lbs.	40,000 grains
ASC45K/F	27”L X 17”W X 62”H	133 lbs.	45,000 grains
ASC60K/F	27”L X 17”W X 62”H	158 lbs.	60,000 grains

Model	Capacity (salt save)	Efficiency*	Rated Service Flow
ASC25K/F	21,367 gr at 5.88 lbs.	3634 gr/lb at 5.88 lbs.	7.0 gpm @ 6.0 psi
ASC40K/F	31,192 gr at 9 lbs.	3534 gr/lb at 7.5 lbs.	10.9 gpm @ 15.0 psi
ASC45K/F	38,293 gr at 12 lbs.	3534 gr/lb at 9.0 lbs.	12.0 gpm @ 15.0 psi
ASC60K/F	51,057 gr at 15 lbs.	3534 gr/lb at 12.0 lbs.	9.3 gpm @ 15.0 psi

* The efficiency rating is only valid at the stated salt dosage and maximum service flow rate.

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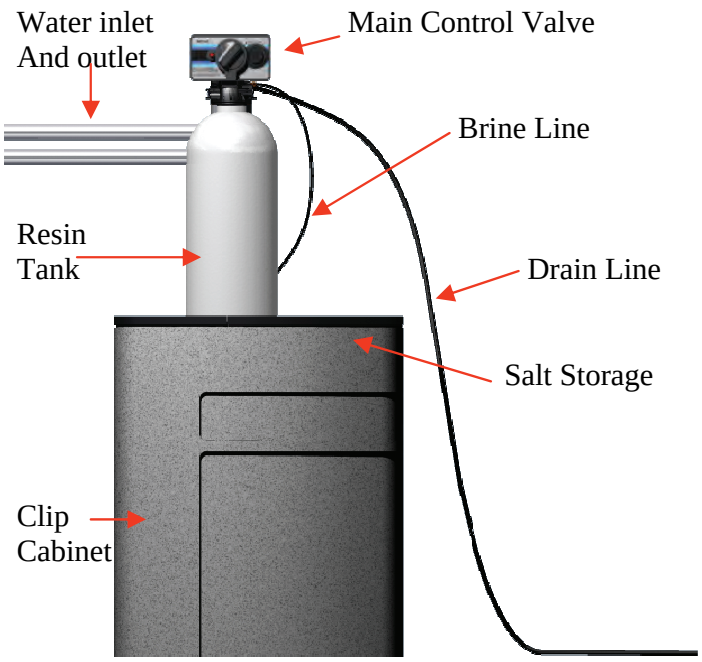
APPENDIX B

INSTALLATION DIAGRAMS



Front View

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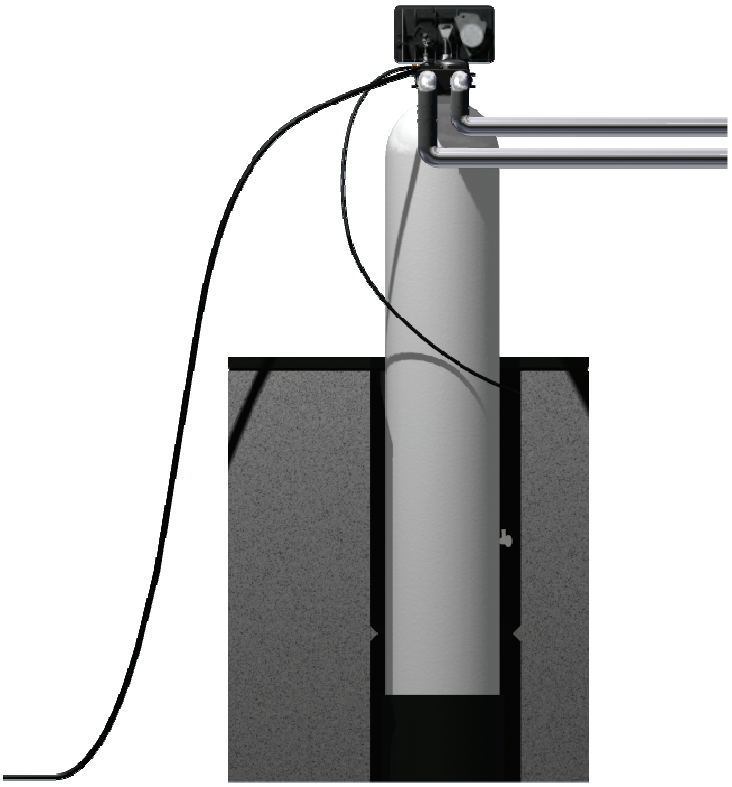

Back View

NOTE: Indoor connections to drains shall be designed and constructed to provide for connection to the sanitary system through an air gap of 2 pipe diameters or 25 mm. (1 inch), whichever is larger.

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These softeners conform to WQA S-100 for the specific performance claims as verified and substantiated by test data. They have demand initiated regeneration (D.I.R.) feature that complies with specific performance specifications intended to minimize the amount of regenerant brine and water used in their operation. These softeners have a rated softener efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on sodium chloride) and shall not deliver more salt than their listed ratings. The rated salt efficiency is measured by laboratory tests described in NSF/ANSI Standard 44. These tests represent the maximum possible efficiency that the systems can achieve. Operational efficiency is the actual efficiency after the system has been installed and may vary due to individual application factors including water hardness, water usage, and other contaminates (i.e. iron) that reduce the softener's capacity.

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